

IN THE ABSTRACT:

~~For the purpose of efficiently using radiation in collecting projection data using a multi-row detector, an~~ An X-ray CT apparatus ~~comprising including~~ an X-ray tube 20, a detector array 23 ~~comprised of including~~ a plurality of detector rows 1a—4a and 1b—4b along the axis of rotation ~~for acquiring projection data of a subject by X-rays, and a reconstructing section for calculating and reconstructing tomographic image data of the a subject based on the acquired projection data, data.~~ has The CT apparatus also includes a collimator 22 for adjusting the emission extent of the X-rays from the X-ray tube 20 in response to a control command, and a control section for calculating detector rows required for acquiring the projection data for use in reconstruction of a certain portion of the tomographic image data based on parameters relating to reconstruction of the tomographic image data by the reconstructing section, and outputting the control command to the collimator for emitting the X-rays to impinge upon the calculated detector rows.